

What is claimed is:

1 1. A method for assembling carbon particles into at least one aligned fiber, the
2 method comprising the step of drawing glass containing carbon particles into a fiber.

1 2. The invention as defined in claim 1 wherein said carbon particles are carbon
2 nanotube molecules.

1 3. The invention as defined in claim 1 wherein said carbon particles are carbon
2 fibrils.

1 4. The invention as defined in claim 1 further comprising the step of twisting said
2 fiber.

1 5. The invention as defined in claim 1 further comprising the step of twisting said
2 fiber while heating said fiber to facilitate its twisting.

1 6. The invention as defined in claim 1 further comprising the step of heating said
2 glass containing carbon particles while drawing it.

1 7. The invention as defined in claim 1 wherein said drawing step produces a
2 plurality of aligned fibers, the method further comprising the step of twisting said
3 plurality of fibers, whereby said aligned nanotube fibers are drawn towards the axis of
4 said fiber so as to expel glass that was located between and within said aligned fibers
5 prior to performing said twisting.

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1 8. The invention as defined in claim 1 further comprising the step of forming said
2 glass containing carbon particles.

1 9. The invention as defined in claim 8 wherein said forming step further
2 comprises the step of solidifying a mixture of carbon particles within a sol-gel solution
3 whereby a body is formed.

1 10. The invention as defined in claim 9 wherein said forming step further
2 comprises the step of dispersing carbon particles within said sol-gel solution to form said
3 mixture.

1 11. The invention as defined in claim 9 wherein said solidifying step further
2 comprises the step of adding an ester to said mixture.

1 12. The invention as defined in claim 9 wherein said body is porous

1 13. The invention as defined in claim 9 further comprising the step of imbuing
2 said body with at least one other material.

1 14. The invention as defined in claim 9 further comprising the step of heating
2 said preform to consolidate it, whereby a consolidated body is formed.

1 15. The invention as defined in claim 9 further comprising the step of
2 incorporating said body into a larger body to form a preform.

1 16. The invention as defined in claim 15 wherein said larger body is a glass body
2 having a hole.

1 17. The invention as defined in claim 15 wherein said incorporating step further
2 comprises the step of heating said larger body to consolidate it.

1 18. The invention as defined in claim 15 further comprising the step of
2 incorporating at least one other body into said larger body so that said perform contains
3 multiple bodies.

1 19. The invention as defined in claim 1 further comprising the step of removing
2 some glass from said fiber.

1 20. The invention as defined in claim 19 wherein said glass that is removed is
2 from an exterior portion of said fiber.

1 21. The invention as defined in claim 19 wherein said removing is performed
2 using at least a mechanical process.

1 22. The invention as defined in claim 19 wherein said removing is performed
2 using at least a chemical process.

1 23. A glass fiber containing carbon particles.

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1 24. The invention as defined in claim 23 wherein said carbon particles are carbon
2 nanotube molecules.

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1 25. The invention as defined in claim 23 wherein said carbon particles are carbon
2 fibrils.

1 26. A method for assembling carbon particles into at least one aligned fiber, the
2 method comprising the step of drawing a preform of glass containing carbon particles into
3 a fiber, whereby said carbon particles are substantially aligned.

1 27. The invention as defined in claim 26 wherein said carbon particles are carbon
2 nanotube molecules.

1 28. The invention as defined in claim 26 wherein said carbon particles are carbon
2 fibrils.

1 29. A plurality of carbon-particles-with-at-least-some-glass fibers, said fibers
2 having been drawn substantially together from a single preform.

1 30. The invention as defined in claim 29 wherein said carbon-particles-with-at-
2 least-some-glass fibers are twisted together.

1 31. The invention as defined in claim 29 wherein said carbon particles are carbon
2 nanotube molecules.

 32. The invention as defined in claim 29 wherein said carbon particles are carbon
fibrils.

1 33. A glass-carbon particle fiber comprising aligned carbon particles commingled
2 with at least some glass.

1 34. The invention as defined in claim 33 wherein said carbon particles were
2 aligned while said fiber was drawn.

1 35. The invention as defined in claim 33 wherein said carbon particles are carbon
2 nanotube molecules.

1 36. The invention as defined in claim 33 wherein said carbon particles are carbon
2 fibrils.

1 37. A carbon particle fiber comprising aligned carbon particles that were aligned
2 by having been drawn while intermixed within a carrier substance.

1 38. The invention as defined in claim 37 wherein said carbon particles are carbon
2 nanotube molecules.

1 39. The invention as defined in claim 37 wherein said carbon particles are carbon
2 fibrils.

1 40. A method for producing at least one fiber, the method comprising the steps
2 of:
3 embedding said carbon particles in glass; and
4 drawing said glass with said embedded carbon particles into a fiber so that said
5 carbon particles are substantially aligned within said fiber.

1 41. The invention as defined in claim 40 wherein said carbon particles are carbon
2 nanotube molecules.